

# Mishap Investigation and Reporting

**LG #19**

# A. Background

# Mishap Definition

- A mishap is an unplanned incident causing injury, work-related illness, or death personnel or material loss or damage to property

# Basic Information

- Mishaps prevented by correcting or controlling identified hazards
- Hazard Abatement Program defined by OPNAVINST 5100.19 (series)
- Thorough mishap investigations help prevent recurrence
- All investigation & reporting efforts aimed at preventing mishaps

# Mishap Investigations

- All mishaps should be investigated
- Mishap investigations do not assess blame
- Should be conducted separately from all other investigations
- Mishap investigations collect information for safety purposes only

# Reporting of Mishaps

- Reported internally within the ship first through:
  - Internal Mishap/Near Mishap Report
  - Accident/Injury Report
  - OPREP-3 or Unit SITREP if serious
- Safety Officer usually investigates these mishap reports

# Mishaps Reported Outside of Command

- Class A Mishap
  - Total cost of reportable damage \$1 Million or more
  - Injury or illness resulting in death or permanent total disability

# Mishaps Reported Outside of Command

- Class B Mishap
  - Total cost of reportable property damage \$200K or more, but less than \$1 Million
  - Injury or work-related illness resulting in permanent, partial disability OR
  - Mishap resulting in hospitalization of 5 or more people



# Mishaps Reported Outside of Command

- Class C Mishap
  - Total cost of reportable property damage \$10K or more, but less than \$200K
  - Injury preventing an individual from performing regularly scheduled duty or work beyond the day or shift on which it occurred OR
  - Nonfatal illness or disability causing loss of time from work or disability at any time

# Class C Mishaps

- Reported to Naval Safety Center when
  - Total cost of reportable property damage is \$10K or more, but less than \$200K
  - Injury exists preventing an individual from performing regularly scheduled duty or work 5 days beyond the day or shift on which it occurred

# Special Case Mishaps

- Reportable to the Naval Safety Center
  - All cases of electrical shock
  - All cases of HM, chemical, or toxic exposures requiring medical attention
  - All cases of back injury requiring medical attention
  - All mishaps involving explosives, oxidizers, incendiaries, explosive systems, or chemical warfare agents

# Other Things to Know

- Class A mishaps require formation of Mishap Investigation Board
  - They write a Mishap Investigation Report (MIR)
- All other reportable mishaps are reported using Mishap Report (MR)
  - Sent to Naval Safety Center within 30 days of mishap

# Other Things to Know

- Off-duty, recreational, & motor vehicle mishaps reported using the formats in OPNAVINST 5100.19 (series), Chapter A6
  - Mishaps reportable if victim loses 5 or more work days
  - Government vehicle reportable if \$2K damage, fatality, or lost time injury (A, B, or C severity)
  - Private vehicle reportable if \$2K government property damage, fatality, or lost time injury (A, B, or C severity)

## B. Mishap Investigations

# When a Mishap Occurs

- Safety Officer notified
- Safety Officer then responsible for ensuring investigation conducted
  - If Class A, OPREP-3 notifies chain of command
  - ISIC (or higher authority) appoints Mishap Investigation Board (MIB)
  - MIB investigates mishap
- For all other mishaps, Safety Officer conducts investigation & prepares Mishap Report

# Purpose of Investigation

- Sole purpose of safety mishap investigation is mishap prevention, not to determine accountability
- “Privileged Information”-- concept used to encourage free and open disclosure of safety information during the investigation



# Privileged Information

- Testimony, evidence, or data given to mishap investigation board based on assurances the board will use the information for SAFETY PURPOSES ONLY

# Important Notes

- 1 All personnel involved as witnesses or as investigators should know that mishap information will be protected--it's confidential
- 2 The statements for safety investigations are never taken under oath, and can be rumors, hearsay, or opinions about the mishap, as well as known facts

## C. Mishap Investigation Boards (MIB)

# The Board

- Consists of Senior Member and at least 2 other board members
- Medical member may be appointed if death involved
- ISIC is appointing authority
  - Can appoint or delegate appointment of rest of mishap board
  - Usually consists of commissioned unrestricted line officers except for LCAC mishaps

# What Does The Board Do?

- Gathers evidence, takes statements, consolidates information
- Prepares Mishap Investigation Report (MIR)
  - Gives probable or known causes
  - Gives conclusions and recommendations through chain of command
  - Put out as lessons learned to the fleet
  - Required to be sent to Naval Safety Center within 30 days of MIB convening

## D. Conducting a Safety Investigation

# OK, a Mishap Occurred. Now What?

- Take care to preserve mishap scene and save evidence
  - Protect mishap site from loss or further damage
  - Make an accurate plot of the scene
  - Take photographs or videotape recordings of wreckage, distribution, and surrounding area
  - Diagram any underwater damage
  - Collect any transitory medical evidence
    - Specimens to determine blood alcohol or drug levels

# The MIB or Safety Officer

- Collects, organizes, interprets, protects all physical & testimonial evidence
- Ensures photographs/videotapes accurately depict mishap scene
- Interprets logs, records, blueprints, schematics, and written procedures
- Takes statements from witnesses
- Reconstruct sequence of events



# Gathering Evidence

- Witness statements
- Medical materials
- Wreckage or damaged equipment
- Signs of criminal intent

**Note: Gathered evidence may be releasable to other investigators. Information shall NOT be released revealing the source of any physical evidence obtained as a result of privileged information, nor testimony given under assurance of privilege.**

# E. Determining Mishap Causes

# Contributing Causes to Mishaps

- Human error
  - Cause of 50% of all mishaps
  - Takes into account physical factors
    - Ergonomics, physical strength of individual, physical stresses, body's responses
  - Takes into account mental factors
    - Attitudes, training retention/comprehension, mental stresses and illnesses

# Contributing Causes to Mishaps

- Maintenance and support factors
  - Factors may include
    - Improper maintenance
    - Poor prioritization of work requests
    - Lack of adequate QA
  - Shipyards, IMA's, contractors & ship's force may be involved

# Contributing Causes to Mishaps

- Administrative and supervisory factors
  - Possible effect of regulations and enforcement from all levels in chain of command
  - Execution of procedures and policies from higher authority
    - Naval warfare publications (NWP)
    - Navy tactical publications (NTP)
    - Operational orders (OPORDS)
    - Standing orders
  - Supervisory factors--training, qualifications, etc.

# Contributing Causes to Mishaps

- Material failures or malfunctions
  - Faulty design
  - Defective manufacture or repair
- Environmental conditions
  - Usually not associated with causative factors

# F. Mishap and Investigation Reports

# Investigation by Mishap Board

- MIR contains factual information about the mishap
  - Injured personnel names
  - Extent of injuries
  - Board conclusion on causes
- Considered a Limited Use Mishap Report
  - Contains privileged information
- Endorsed by chain of command & goes to Naval Safety Center



# Investigation by Other than Mishap Board

- MR contains factual information
  - No conclusions about the mishap cause(es)
- MR is a General Use Mishap Report
  - Does not contain privileged information
- Report sent directly to Naval Safety Center

# Requirements and Similarities

- Both the Mishap Investigation Report (MIR) and Mishap Report (MR) must be submitted within 30 days of the mishap or convening of a mishap board
- Both reports may be used to develop lessons learned and prevent future mishaps